

Project Name:

Projeto de Circuitos Eletrônicos para IoT V1.0.0

Released 19/12/2025


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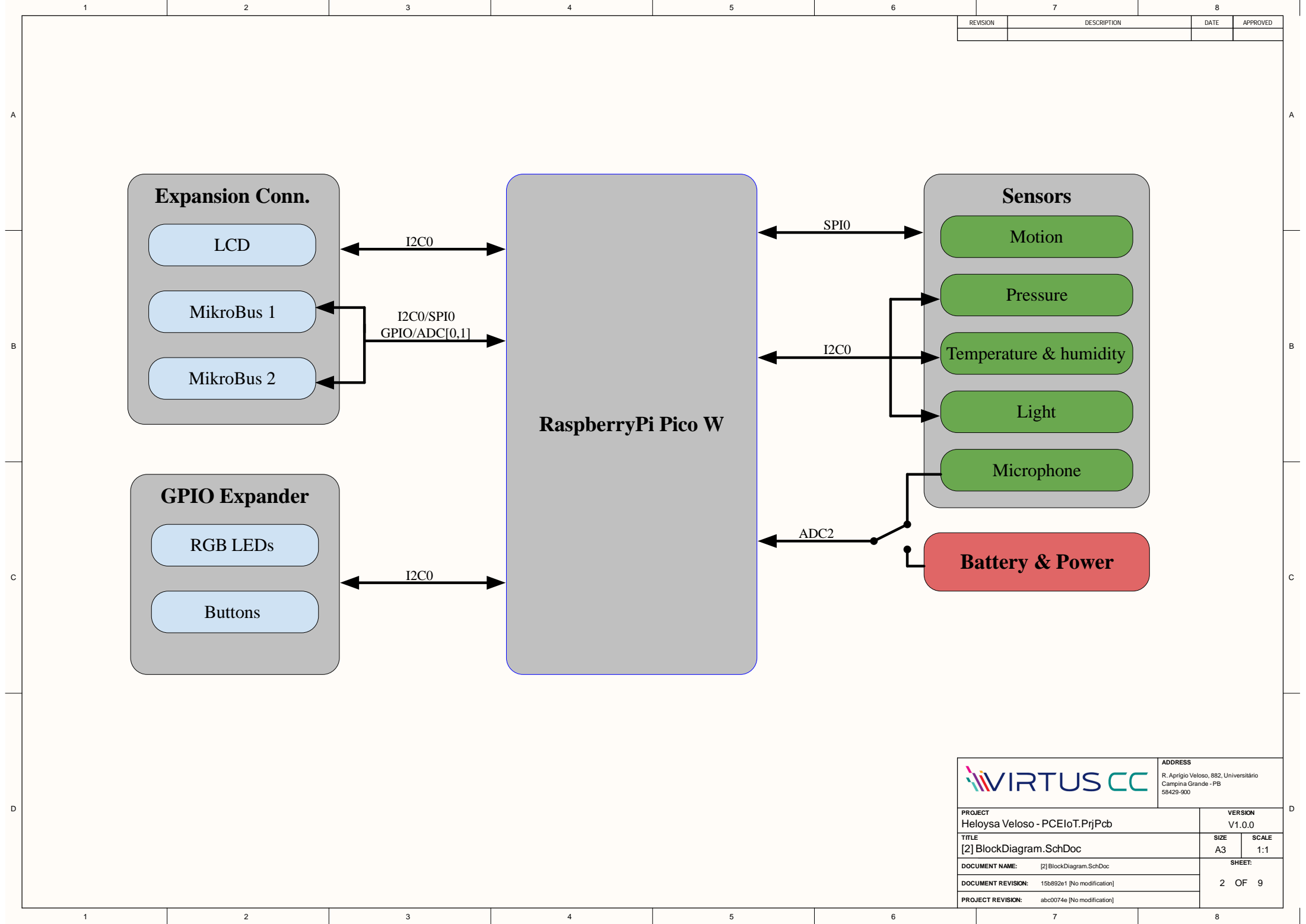
Design Notes

Example of informational notes.


Example of cautionary design notes.

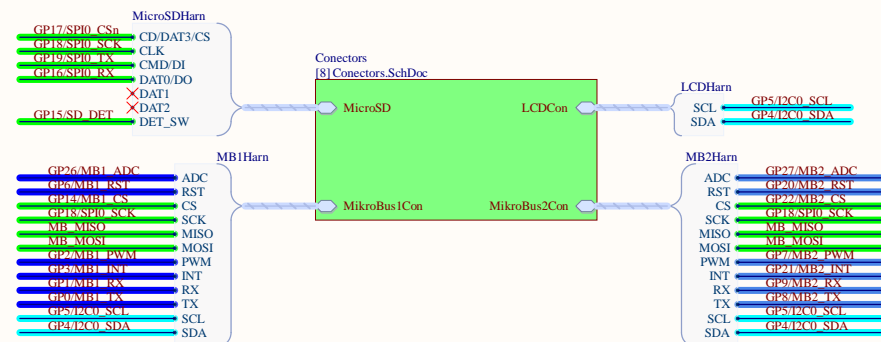
Example of critical design notes.

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PROJECT Heloyssa Veloso - PCEIoT.PrjPcb		VERSION V1.0.0	
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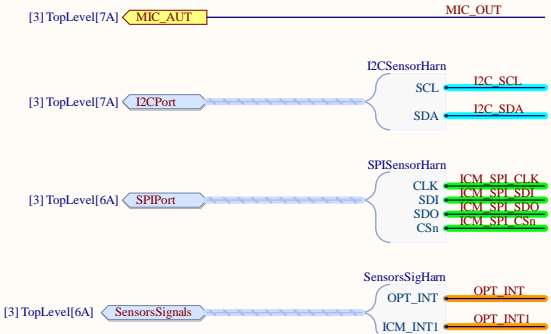
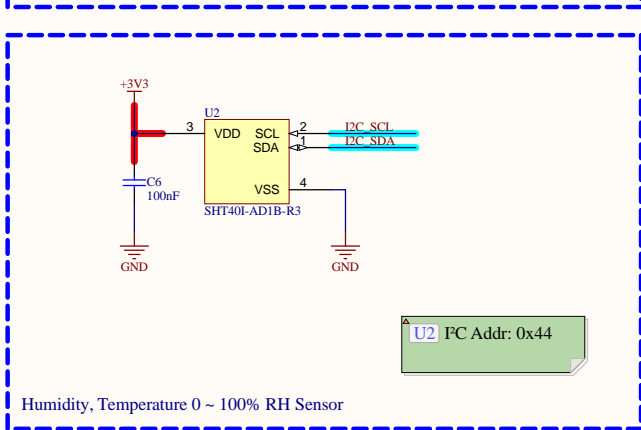
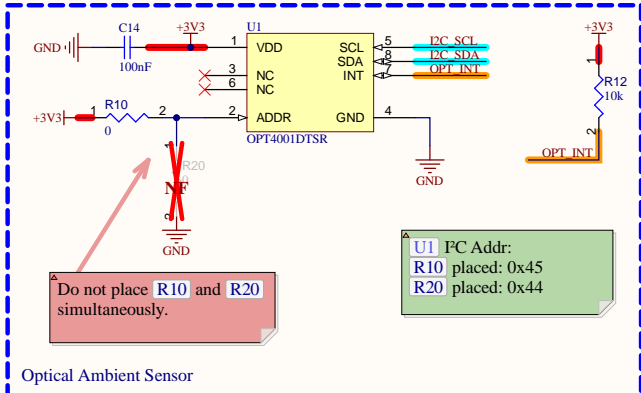
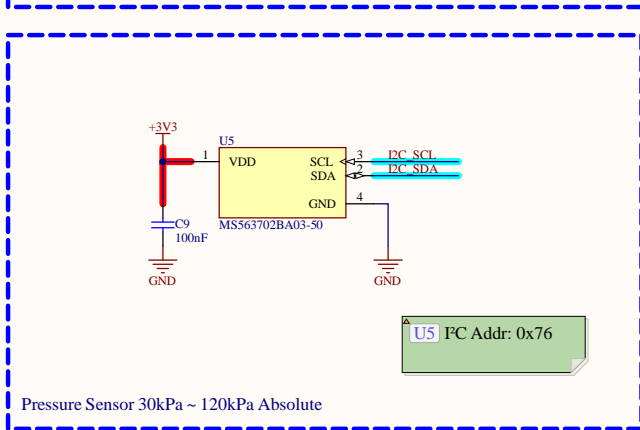
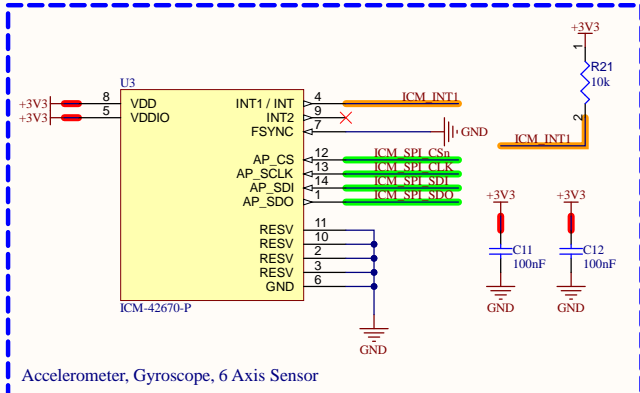
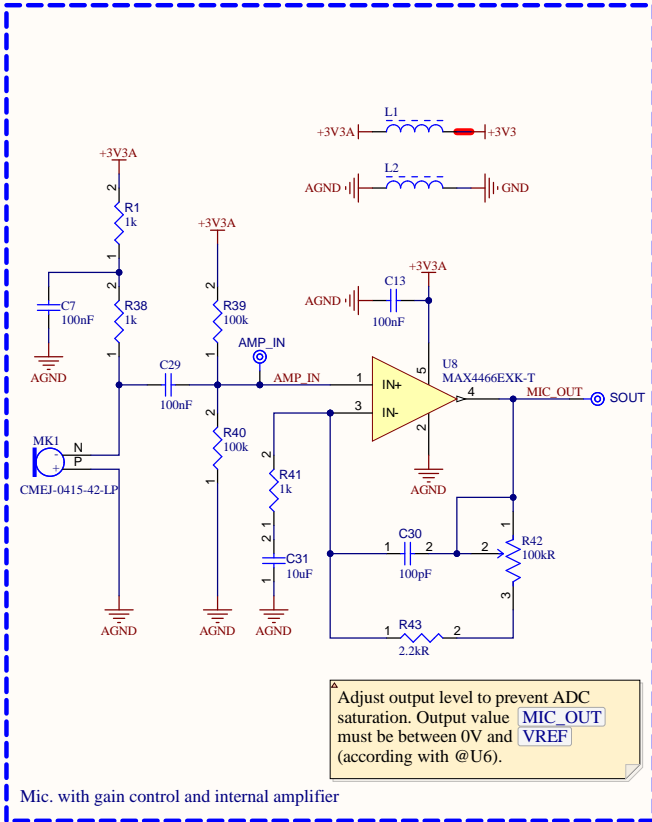
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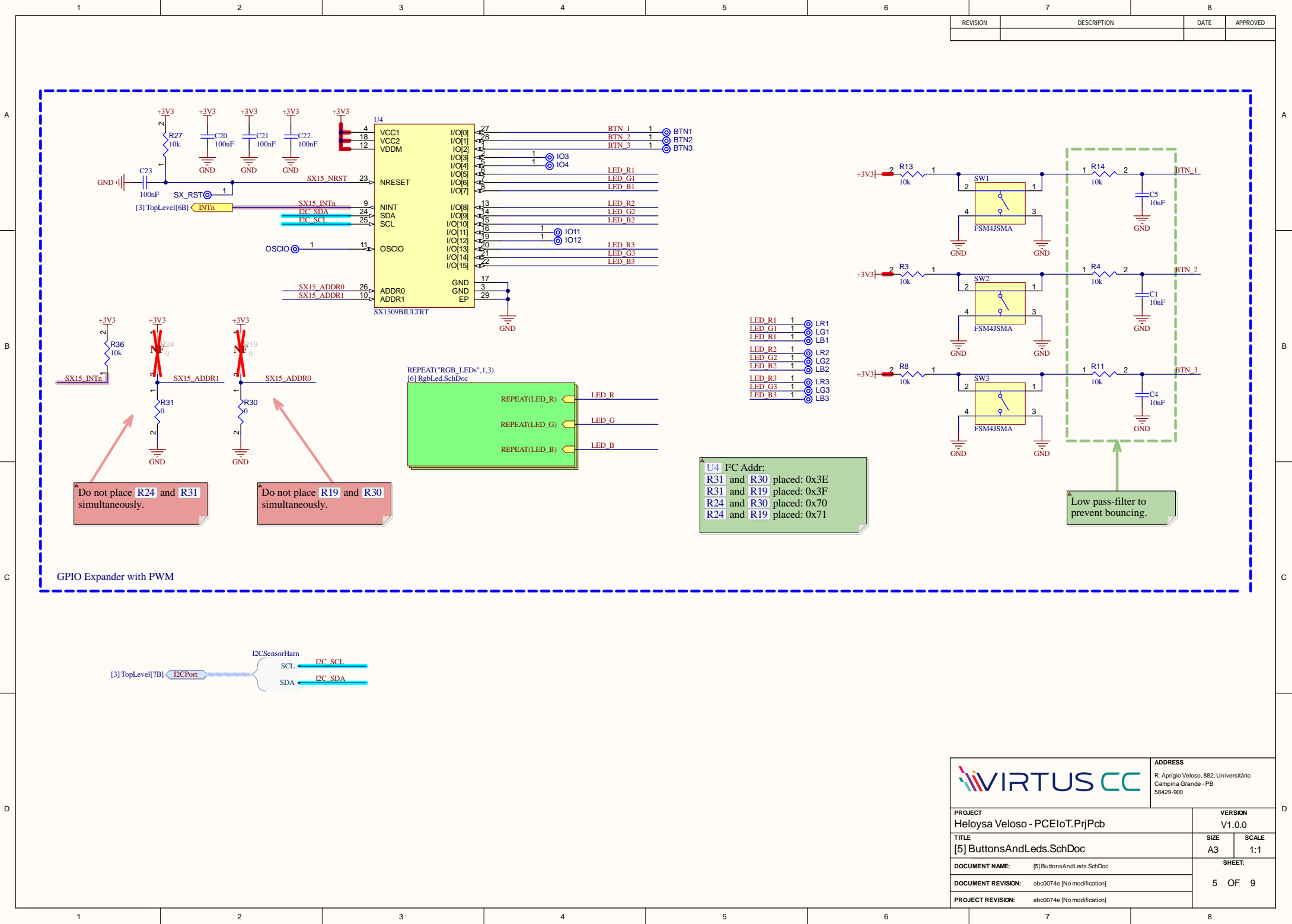
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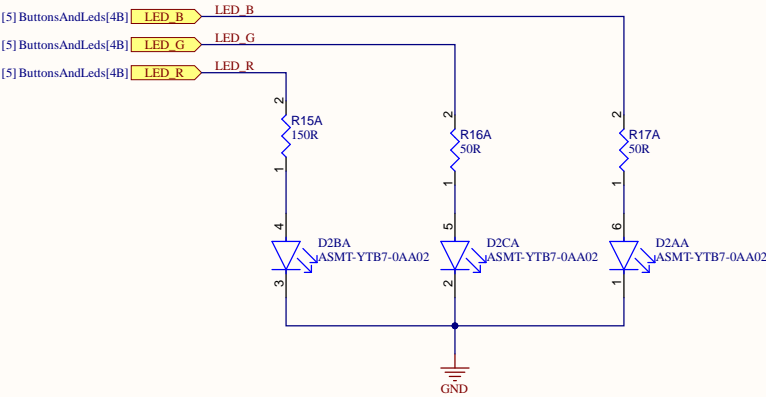
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R15, R16 and R17 calculated based on voltage drops for each LED for a same current amount for 10mA.

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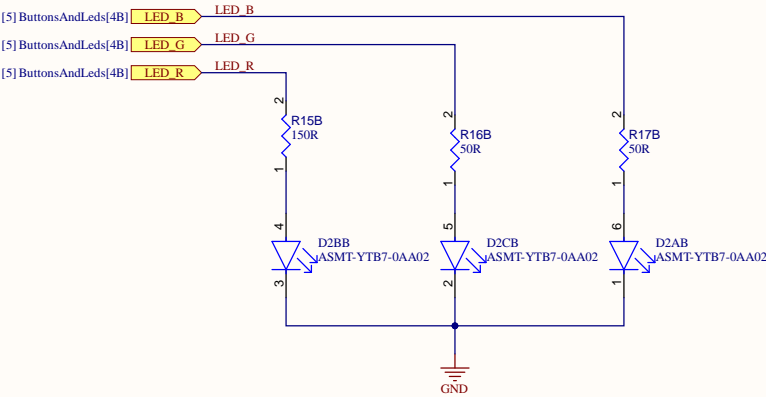
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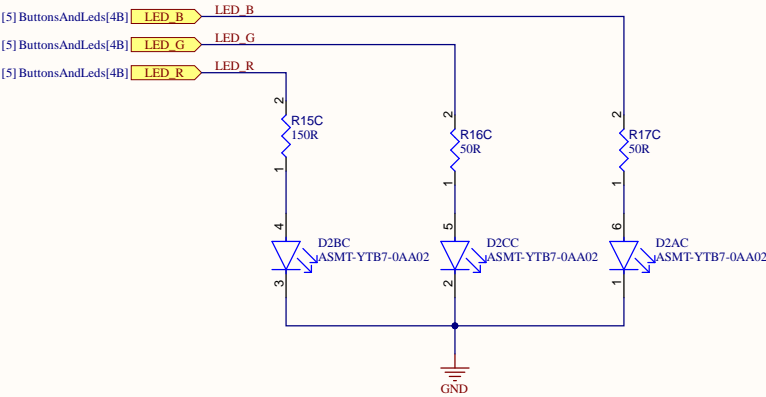
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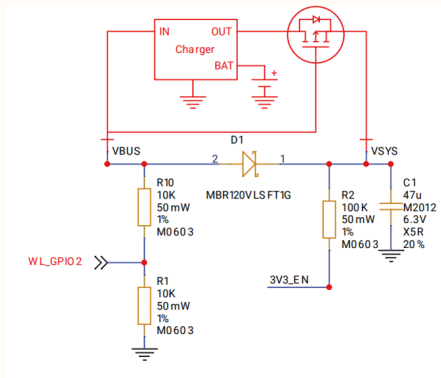
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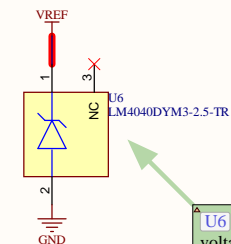


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RPI Pico WBattery suggestion usage

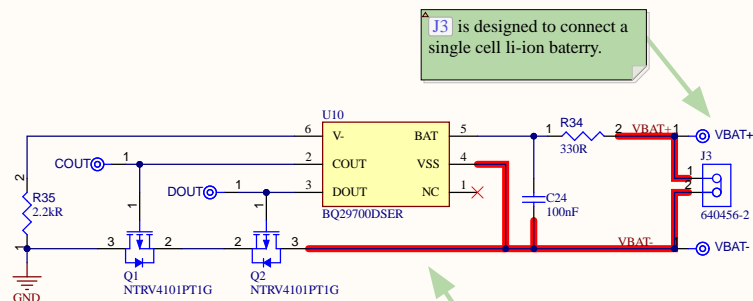


ADC reference voltage



U6 sets ADC reference voltage to 2.5 V.

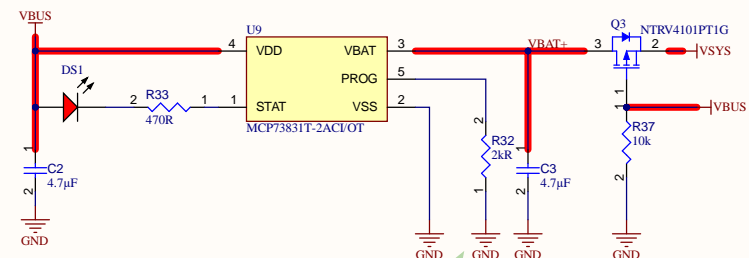
Battery protection circuit



J3 is designed to connect a single cell li-ion battery.

U10 cutoff protection values:
OVP: 4.275V
UVP: 2.8V

Battery charger circuit



R32 sets fast charge current to 500mA.

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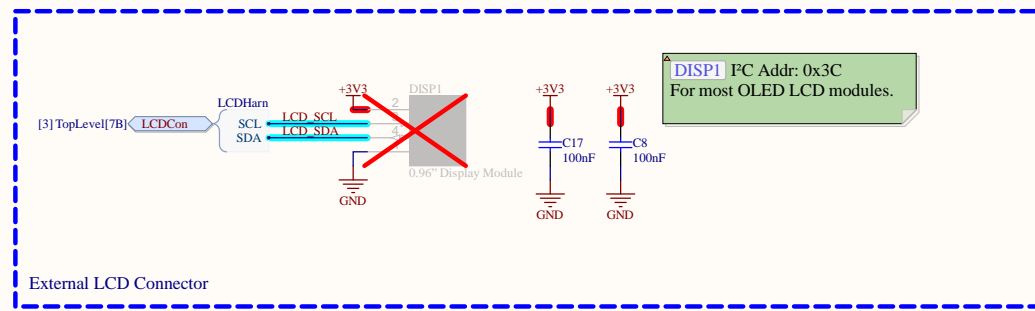
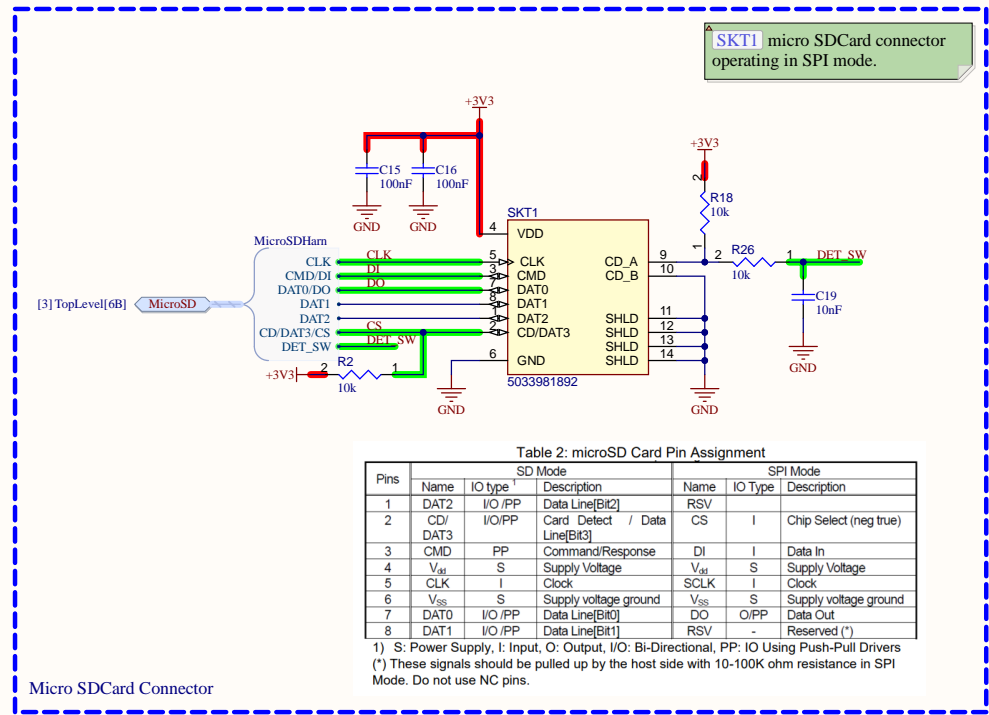
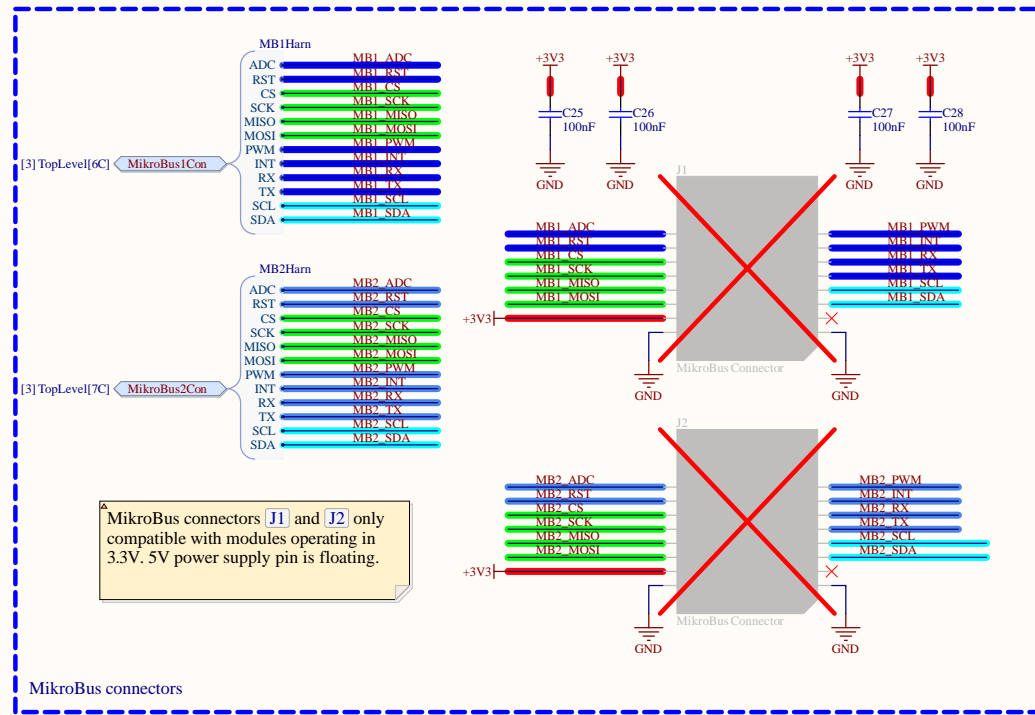
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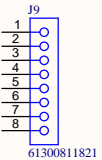
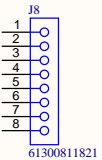
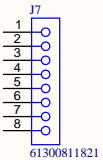
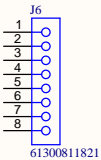
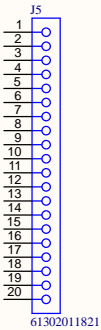
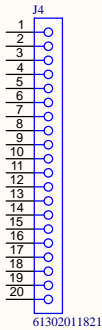
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